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A NEW SPECIES OF LARGE IGUANA FROM THE BAHAMA ISLANDS.

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Mr. J. H. Riley, of the United States National Museum, while attached to the Bahama Expedition of the Baltimore Geographical Society, during the summer of 1903, collected a good series of a large iguana belonging to the genus Cyclura on Watlings Island. He also secured a fine specimen of Cycliera beolopha Cope on Andros Island, the type locality of this welldefined species. Two specimens collected by Mr. William Palmer in 1900 on the Isle of Pines, which I have regarded as typical of Cyclura cyclura, have furnished material for comparison, with the result that the Watlings Island specimens are here described as a new species. It will be noted that a large iguana from Cat Island has been recorded under the name of the Cuban species (Cope, Proc. U. S. Nat. Mus., 1887, p. 437), but in view of the close proximity of Cat Island to Watlings, it is probably nearer to the iguana described below, if not actually identical with it, than to the form inhabiting Cuba. The third species peculiar to the Bahamas is Cyclura curinata from Turk's Island, the most peculiar of them all.

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Cyclura rileyi, sp. nov.

Diagnosis.—Combs on second and third toes; scales on muzzle large; no median protuberances anterior to eyes; verticils on tail feebly developed; a large patch of tubercular scales on side of throat below angle of mouth; a small shield in contact with nasal between supranasal and postnasal; dorsal crest represented by about 75 (71-79) enlarged strongly keeled scales.

Habitat .--- Watlings Island, Bahamas.

Type.-United States National Museum, No. 31,969; Watlings Island, Bahamas, July 13, 1903; J. H. Riley, collector.

Description .- Adult female; United States National Museum, No. 31,969; Watlings Island; July 13, 1903; J. H. Riley, collector. Rostral wide, much wider than mental, broadly in contact with nasal; nasal very large, larger than any other shield on the head, broadly hexagonal, forming a long suture with its fellow; nostril nearly ovoid, large, near the upper posterior corner of the masal; masal in contact with a large elongate supranasal, and two postnasals, the upper one small and squarish, the lower larger, both this and the nasal separated from the anterior supralabials by two or three rows of small shields; supranasals broadly in contact on the middle of the snout, each followed by two pairs of prefrontals, one behind the other, both larger than supranasals, and the posterior pair larger than the anterior; the prefrontals are separated on the median line by a few small and irregular shields; top of head behind prefrontals covered by small irregular polygonal shields, those on outer and anterior portion of supraocular region being smaller, but otherwise without a clearly recognizable arrangement into supraorbital semi-circles and supraocular disks; all cephalic shields and scales smooth or slightly tuberculate; occipital somewhat larger than the adjacent scutes; no distinctly differentiated superciliary shields, only two of the anterior ones adjoining the canthus rostralis being somewhat enlarged and elongated; four small shields on canthus rostralis behind postnasals; shields covering the loreal triangle numerous, flat, elongate, irregularly polygonal and varying in size, anteriorly wedged in between the nasals and the supralabials, two to three rows separating the latter from the postnasal; a series of enlarged keeled suboculars separated from the supralabials by about seven rows of small elongate hexagonal scales; scales covering the temporal region irregular in size and shape, some almost granular; a group of larger tubercular shields or scales in front of the upper edge of the tympanum, one being particularly prominent, and a single series of similar ones along the anterior edge of the tympanum; tympanum ovoid, its vertical diameter less than diameter of eye; supralabials low and elongate, six to under the center of the eye; lower labials higher than the supralabials, but smaller than the malar shields; the three anterior malars in contact with the lower labials, the posterior ones separated from them by one and two rows of elongate polygonal shields but no granules or small scales; the posterior malars with a blunt tubercle or keel at the

lower edge; throat covered with small uniform juxtaposed scales; on each side below the angle of the mouth a patch of larger, more rounded tubercles separated by scales corresponding to the other throat scales; a strong transverse fold across the lower neck joined by numerous longitudinal folds on the sides of the neck and a high (about 25 mm.) dewlap on the median line; back covered with small uniform squarish scales in tolerably regular series, 10-12 scales in the long diameter of the tympanum; a curved nuchal crest consisting of about 20 spines, the longest about 25 mm, high and slightly falcate; a series of 79 enlarged, elongate, keeled scales forming a slight crest on the median line of the back; scales on underside similar to those on back, those on upper side of arm, especially forearm, somewhat larger, those on hind legs even more so (about 6 in the long diameter of the ear) and with indication of keels; a single series of about 20 femoral pores; inner side of second toe with one "comb," of third toe with two "combs," each consisting of three lobes; tail compressed, covered with obliquely keeled scales in vertical rows forming but faintly indicated verticils, about five rows of the larger scales to a verticil where such can be made out; tail surmounted by a series of enlarged, pointed, triangular scales forming a strongly serrated edge.

Color, which according to Mr. Riley has not changed materially in the preserving fluid, dull "smoke gray," on the upper surface irregularly and obscurely marked with variously anastomosing blotches and marblings of "tawny-olive."

Dimensions.—Total length (tail regenerated), 597 mm.; tip of snout to vent, 272: tip of snout to orbit, 24: tip of snout to ear, 51; width of head, 35; fore limb, 106: hind limb, 161; vertical diameter of tympanum, 9.

In No. 31,966 which has the tail complete the dimensions are as follows: Total length, 558 mm.; tip of snout to vent, 208; vent to tip of tail, 350. The tail is consequently more than $1\frac{1}{2}$ times the length of head and body.

Variation.—The individual variation displayed by the seven specimens collected is surprisingly small. The scutellation is essentially as in the type specimen described above, with here and there an additional small shield intercalated where two sutures meet, the only greater deviation being that of No. 31,970 in which the anterior prefrontals are devided transversely. The anterior superciliaries are also better defined in some of the specimens than in the one described, and the arrangement of the supraorbital ridge is also occasionally better defined. The number of enlarged keeled scales forming the dorsal crest, or rather ridge, varies between 71 and 79, one each having these numbers, one each having 73, 76 and 77 and two 75 scales. The color is also fairly uniform throughout the series.

Remarks.—This new species, though probably nearest related to the Cuban *C. cyclura*, shows certain leanings towards *C. cornuta* in the smallness of the scales covering arms and legs and the undeveloped condition of the caudal verticils. The similarity to the other Bahaman species is

not remarkably close, and altogether the new form may be easily identified by the characters pointed out in the diagnosis.

Field notes by Mr. Riley.-This species is very common on two small keys in the large salt-water lake on Watlings Island, but is very rarely found on the main part of the island, probably caused by the large number of cats that are said to be running wild. The iguanas must have reached the keys by swimming. The large key is locally known as Iguana Cay. It is several hundred yards long and fifteen or twenty broad. Mangroves grow around the shore, but the center is covered with a large cactus tree. The key, of course, is nothing but coral rock. The ground under the cactus is bare and here most of the iguanas are found. They have a habit of running very swiftly and then suddenly stopping, unless very much frightened when they go into holes in the rock, with which their domain is abundantly supplied. They have a lumbering gait that carries them over the ground very rapidly. They also climb trees to some extent, and one of those shot was about five feet up in a mangrove. Two of the females opened were heavy with eggs, one of them containing five, about the size of turtle eggs.